**Forms of Equations of Lines**

* ***Analytical Intelligence*:** Compare and contrast the various forms of equations of lines. Create a flow chart, a table, or any other product to present your ideas to the class. Be sure to consider the advantages and disadvantages of each form.
* ***Practical Intelligence*:** Decide how and when each form of the equation of a line should be used. When is it best to use which? What are the strengths and weaknesses of each form? Find a way to present your conclusions to the class.
* ***Creative Intelligence*:** Put each form of the equation of a line on trial. Prosecutors should try to convince the jury that a form is not needed, while the defense should defend its usefulness. Enact your trial with group members playing the various forms of the equations, the prosecuting attorneys, and the defense attorneys. The rest of the class will be the jury, and the teacher will be the judge.

Slope-Intercept Form y=mx+b

Point-Slope Form y - y1 = m(x – x1)

Standard Form Ax + By = C

Compare and contrast the various forms of equations of lines. Create a flow chart, a table, or any other product to present your ideas to the class. Be sure to consider the advantages and disadvantages of each form.

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Decide how and when each form of the equation of a line should be used. When is it best to use which? What are the strengths and weaknesses of each form? Find a way to present your conclusions to the class.

Slope-Intercept Form y = mx + b

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Put each form of the equation of a line on trial. Prosecutors should try to convince the jury that a form is not needed, while the defense should defend its usefulness. Prepare for the trial by splitting your group in two sides, the prosecution and the defense. Each side must do the following:

* Write an opening speech
* Prepare a list of witnesses with questions and possible answers that might be used during trial,
* Design a closing presentation
* Determine which team member will portray the different parts of the trial – prosecuting attorney, witnesses, defense attorney, and possibly assistant attorneys.
* Visual aids may be used if they are appropriate.

The rest of the class will be your jury, so be prepared to present at the start of class tomorrow.

Slope-Intercept Form y = mx + b

Point-Slope Form y - y1 = m(x – x1)

Standard Form Ax + By = C

**Multiple Intelligences**

***Logical-mathematical Intelligence*:**

1. Sort the given strips into categories.
2. Explain each category on an index card that is placed beside of the matching strips.
3. Write a paragraph explaining why the categories were chosen and if other choices were or were not possible.

***Linguistic/Musical Intelligence*:**

Select one of the following:

1. Slogan
2. Poem
3. Story
4. Song Lyric

In the format of your choice, use each of the items below in a situation that represents the quantity shown. This means that the math behind the quantity shown needs to be explained inside of the final writing or performance (Two girls join three friends for a movie, so they need five seats together. Do not write 2+3=5). The quantity does not need to be in the final product, but a notation must be made in the margin of the paper to notate which quantity is being represented.

***Spatial/Bodily-Kinesthetic Intelligence*:**

Use the materials provided to create physical representations of the quantities shown on each card. Place the card next to the matching representation. On a blank index card, write at least one sentence explaining how the quantity is shown physically. On the other side of the card, explain how this quantity is used in a real life situation.

* Sort the given strips into categories.
* Explain each category on an index card that is placed beside of the matching strips.
* In the space below, write a paragraph explaining why the categories were chosen and if other choices were or were not possible.

Select one of the following:

1. Slogan
2. Poem
3. Story
4. Song Lyric

In the format of your choice, use each of the items in a situation that represents the quantity shown. This means that the math behind the quantity shown needs to be explained inside of the final writing or performance (Two girls join three friends for a movie, so they need five seats together. Do not write 2+3=5). The quantity does not need to be in the final product, but a notation must be made in the margin of the paper to notate which quantity is being represented.

1. Use the materials provided to create physical representations of the quantities shown on each index card.
2. On a blank index card, write at least one sentence explaining how the quantity is shown physically.
3. On the other side of the card, explain how this quantity is used in a real life situation.
4. Place both index cards (the original and your explanations) next to the matching representation.

**MI Fraction Strips/Cards** - Use all boxes for the Logical-mathematical category sort. Use the first column for the other activities.

|  |  |
| --- | --- |
| 1/4 |  |
| 2/7 | Seven students are in a group and two are boys |
| 2/10 | 0.2 |
| 2/3 |  |
| 3/10 | 0.3 |
| 3/12 | I used three eggs out of a dozen |
| 0/6 |  |
| 4/6 |  |

**MI Addition/Subtraction of Whole Numbers** - Use all boxes for the Logical-mathematical category sort. Use the first column for the other activities.

|  |  |
| --- | --- |
| 3 + 2 | 5 |
| 4 + 7 | 11 |
| 5 - 1 | 4 |
| 12 - 3 | 9 |
| 8 + 2 | 11 - 1 |
| 4 + 2 | 6 + 0 |
| 12 - 4 | 3 + 5 |
| 8 - 0 | 8 + 0 |